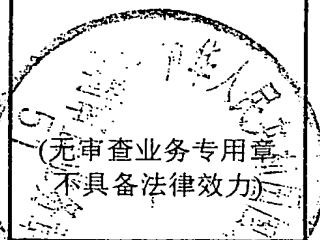
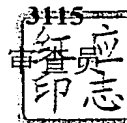


56

中华人民共和国国家知识产权局

邮政编码: 100037

北京阜成门外大街2号8层
中国国际贸易促进委员会专利商标事务所
龙传红



申请号: 99124967.4

部门及通知书类型: 3-D

发文日期:

申请人:

住友特殊金属株式会社

发明名称:

稀土金属永磁体及其生产方法



第一次审查意见通知书

1. ☒ 申请人提出了实审请求, 根据专利法第35条第1款的规定, 审查员对上述发明专利申请进行实质审查。☐ 根据专利法第35条第2款的规定, 国家知识产权局决定自行对上述发明专利申请进行审查。2. ☒ 申请人要求以其在:

| | | | |
|----|---------|-------------|--------|
| JP | 专利局的申请日 | 1998年12月17日 | 为优先权日, |
| JP | 专利局的申请日 | 1999年2月26日 | 为优先权日, |
| JP | 专利局的申请日 | 1999年4月14日 | 为优先权日, |
| JP | 专利局的申请日 | 1999年6月28日 | 为优先权日, |
| JP | 专利局的申请日 | 1999年11月29日 | 为优先权日, |

C P P 2445

☒ 申请人已经提交了经原申请国受理机关证明的第一次提出的在先申请文件的副本。☐ 申请人尚未提交经原申请国受理机关证明的第一次提出的在先申请文件的副本, 根据专利法第30条的规定视为未提出优先权要求。3. ☐ 申请人于____年__月__日和____年__月__日提交了修改文件。

经审查, 其中: ____年__月__日提交的____不能被接受; ____年__月__日提交的____不能被接受;

因为上述修改 ☐ 不符合专利法第33条的规定。 ☐ 不符合实施细则第51条的规定。

修改不能被接受的具体理由见通知书正文部分。

4. ☒ 审查是针对原始申请文件进行的。☐ 审查是针对下述申请文件进行的:

说明书

申请日提交的原始申请文件的第____页;

____年__月__日提交的第____页; ____年__月__日提交的第____页;

____年__月__日提交的第____页; ____年__月__日提交的第____页;

权利要求

申请日提交的原始申请文件的第____页;

____年__月__日提交的第____页; ____年__月__日提交的第____页;

____年__月__日提交的第____页; ____年__月__日提交的第____页;

附图

申请日提交的原始申请文件的第____页;

____年__月__日提交的第____页; ____年__月__日提交的第____页;

____年__月__日提交的第____页; ____年__月__日提交的第____页;

说明书摘要

☐ 申请日提交的;☐ ____年__月__日提交的;

摘要附图

☐ 申请日提交的;☐ ____年__月__日提交的。

回函请寄: 100088 北京市海淀区蓟门桥西土城路6号 国家知识产权局专利局受理处收

2201 2001.7

(注: 凡寄给审查员个人的信函不具有法律效力)

5. ☐ 本通知书是在未进行检索的情况下作出的。
☒ 本通知书是在进行了检索的情况下作出的。
☒ 本通知书引用下述对比文献(其编号在今后的审查过程中继续沿用):

| 编号 | 文 件 号 或 名 称 | 公 开 日 期 (或抵触申请的申请日) |
|----|-------------|------------------------|
| 1 | US5840375A | 1998 年 11 月 24 日 |
| 2 | | 年 月 日 |
| 3 | | 年 月 日 |
| 4 | | 年 月 日 |

6. 审查的结论性意见:

- ☐ 关于说明书：

 - ☐ 申请的内容属于专利法第 5 条规定的不授予专利权的范围。
 - ☐ 说明书不符合专利法第 26 条第 3 款的规定。
 - ☐ 说明书的撰写不符合实施细则第 18 条的规定。

☒ 关于权利要求书：

 - ☒ 权利要求 1、2、4、5、8—10 不具备专利法第 22 条第 2 款规定的新颖性。
 - ☒ 权利要求 3、11—15 不具备专利法第 22 条第 3 款规定的创造性。
 - ☐ 权利要求_____不具备专利法第 22 条第 4 款规定的实用性。
 - ☐ 权利要求_____属于专利法第 25 条规定的不授予专利权的范围。
 - ☐ 权利要求_____不符合专利法第 26 条第 4 款的规定。
 - ☒ 权利要求 9、10、14、15 不符合专利法第 31 条第 1 款的规定。
 - ☐ 权利要求_____不符合实施细则第 2 条第 1 款关于发明的定义。
 - ☐ 权利要求_____不符合实施细则第 13 条第 1 款的规定。
 - ☐ 权利要求_____不符合实施细则第 20 条至第 23 条的规定。
 - ☐

上述结论性意见的具体分析见本通知书的正文部分。

7. 基于上述结论性意见, 审查员认为:

- ☐ 申请人应按照通知书正文部分提出的要求，对申请文件进行修改。
- ☒ 申请人应在意见陈述书中论述其专利申请可以被授予专利权的理由，并对通知书正文部分中指出的不符合规定之处进行修改，否则将不能授予专利权。
- ☐ 专利申请中没有可以被授予专利权的实质性内容，如果申请人没有陈述理由或者陈述理由不充分，其申请将被驳回。
- ☐

8. 申请人应注意下述事项:

- (1) 根据专利法第 37 条的规定, 申请人应在收到本通知书之日起的 肆 个月内陈述意见, 如果申请人无正当理由逾期不答复, 其申请将被视为撤回。
- (2) 申请人对其申请的修改应符合专利法第 33 条的规定, 修改文本应一式两份, 其格式应符合审查指南的有关规定。
- (3) 申请人的意见陈述书和/或修改文本应邮寄或递交给国家知识产权局专利局受理处, 凡未邮寄或递交给受理处的文件不具备法律效力。
- (4) 未经预约, 申请人和/或代理人不得前来国家知识产权局专利局与审查员举行会晤。

9. 本通知书正文部分共有 2 页，并附有以下附件：

- ☐ 引用的对比文件的复印件共____份____页。

第一次审查意见通知书正文

- 1、权利要求 1—8、11—13 是稀土金属永磁体的权利要求，权利要求 9、10、14、15 是制造稀土金属永磁体的方法权利要求，但并不是专用于制造权利要求 1—8、11—13 所述磁体的方法，因而两者之间没有单一性，不符合专利法第 31 条第 1 款的规定。
- 2、对比文件 1 也公开了一种稀土永磁体，并且具体公开（见权利要求 1）了以下技术特征：在稀土—铁—硼磁体表面上涂覆一层 $M_2O_n \cdot SiO_2$ 膜，因而权利要求 1 已被对比文件 1 公开，没有新颖性，不符合专利法第 22 条第 2 款的规定。
- 3、从属权利要求 2、4、5、8 的附加技术特征也在对比文件 1 中公开（见权利要求 1）了：磁体是稀土—铁—硼磁体，氧化膜中包含 SiO_2 ，并且形成玻璃态的膜、其厚度为 $0.1-3\mu m$ ，因而权利要求 2、4、5、8 也没有新颖性，不符合专利法第 22 条第 2 款的规定。
- 4、虽然对比文件 1 没有公开采用稀土—铁—氮磁体的情况，但这里只是利用在磁体表面形成一层膜，使腐蚀物与磁体隔离达到抗蚀效果，对于本领域普通技术人员来说，很容易想到该膜同样可以涂在稀土—铁—氮磁体表面，达到抗蚀效果，因而权利要求 3 没有突出的实质性特点和显著的技术进步，不具有专利法第 22 条第 3 款规定的创造性。
- 5、申请人如果将权利要求 6、7 的附加技术特征加入权利要求 1，将有利于其新颖性的确立。
- 6、权利要求 9 在磁体表面涂覆金属氧化膜的方法，已经在对比文件 1 中公开（见权利要求 1），因而没有新颖性，不符合专利法第 22 条第 2 款的规定。
- 7、权利要求 10 的附加技术特征也已在对比文件 1 中公开（见权利要求 1）：氧化膜中包含 SiO_2 ，因而，权利要求 10 没有新颖性，不符合专利法第 22 条第 2 款的规定。
- 8、权利要求 11 涉及一种稀土永磁体，对比文件 1 也公开（见权利要求 1）了一种稀土永磁体，虽然对比文件 1 没有提及氧化膜和磁体间的界面层和稀土原子通过氧原子与膜内金属原子化学键合，但相同的原料通过相同的方

法制得的产品必然相同，这些特征在对比文件 1 的磁体中也必然存在，本领域普通技术人员可以通过常用技术，对对比文件 1 中的磁体进行检测，得到权利要求 11 所述的技术特征，因而权利要求 11 也没有突出的实质性特点和显著的技术进步，没有专利法第 22 条第 3 款规定的创造性。

9、从属权利要求 12、13 的附加技术特征也已在对比文件 1 中公开（见权利要求 1），因而也没有创造性，不符合专利法第 22 条第 3 款的规定。

10、权利要求 14 涉及一种稀土永磁体的方法，对比文件 1 也公开了生产稀土永磁体的方法，且公开（见权利要求 1）了在磁体表面涂覆金属氧化膜的步骤，虽然没有提及氧化膜和磁体间的界面层和稀土原子通过氧原子与膜内金属原子化学键合，但相同的原料通过相同的方法制得的产品必然相同，这些特征在对比文件 1 的磁体中也必然存在，本领域普通技术人员可以通过常用技术，对对比文件 1 中的磁体进行检测，得到权利要求 14，因而权利要求 14 没有突出的实质性特点和显著的技术进步，没有专利法第 22 条第 3 款规定的创造性。

11、权利要求 15 的附加技术特征也已在对比文件 1 中公开（见权利要求 1），因而没有创造性，不符合专利法第 22 条第 3 款的规定。

基于上述理由，本申请目前还不能被授予专利权，申请人应该对权利要求进行重新组合，克服上述缺陷。申请人对申请文件的修改应当符合专利法第 33 条的规定，不得超出原说明书和权利要求书记载的范围。

THE PATENT OFFICE OF THE PEOPLE'S REPUBLIC OF CHINA

Address: 6 Xi Tu Cheng Lu, Haidian, Beijing

Post Code: 100088

| | | |
|-------------------------|--|---|
| Applicant: | SUMITOMO SPECIAL METALS CO., LTD. | Date of Notification: Date: <u>30</u> Month: <u>05</u> Year: <u>2003</u> |
| Attorney: | CHUANHONG LONG | |
| Application No.: | 99124967.4 | |
| Title of the Invention: | RARE EARTH METAL-BASED PERMANENT MAGNET, AND PROCESS FOR PRODUCING THE SAME | |

Notification of the First Office Action

1. ☒ The applicant requested examination as to substance and examination has been carried out on the above-identified patent application for invention under Article 35(1) of the Patent Law of the People's Republic of China(hereinafter referred to as "the Patent Law").
☐ The Chinese Patent Office has decided to examine the application on its own initiative under Article 35(2) of the Patent Law.
2. ☒ The applicant claimed priority/priorities based on the application(s):
filed in JP on Dec. 17, 1998, filed in JP on Feb. 26, 1999,
filed in JP on Apr. 14, 1999, filed in JP on Jun. 28, 1999,
filed in JP on Nov. 29, 1999, filed in _____ on _____,
☒ The applicant has provided the priority documents certified by the Patent Office where the priority application(s) was/were filed.
☐ The applicant has not provided the priority documents certified by the Patent Office where the priority application(s) was/were filed and therefore the priority claim(s) is/are deemed not to have been made under Article 30 of the Patent Law.
☐ The application is a PCT continuation.
3. ☐ The applicant submitted amendments to the application on _____ and on _____, wherein the amended _____ submitted on _____ and the amended _____ submitted on _____ are not acceptable, because said amendments do not comply with ☐ Article 33 of the Patent Law.
☐ Rule 51 of the Implementing Regulations of the Patent Law.
The specific reasons why the amendments are not allowable are set forth in the text portion of this Notification.
4. ☒ Examination as to substance was directed to the initial application documents as filed.
☐ Examination as to substance was directed to the documents as specified below:
pages _____ of the description, claims _____ and pages _____ of the drawings submitted on _____,
pages _____ of the description, claims _____ and pages _____ of the drawings submitted on _____,
pages _____ of the description, claims _____ and pages _____ of the drawings submitted on _____,
the abstract submitted on _____, and the figure for the abstract submitted on _____.
5. ☐ This Notification is issued without search reports.
☒ This Notification is issued with consideration of the search results.
☒ Below is/are the reference document(s) cited in this Office Action(the reference number(s) will be used throughout the examination procedure):

| No. | Number(s) or Title(s) of Reference(s) | Date of Publication (or the filing date of conflicting application) |
|-----|---------------------------------------|--|
| 1 | US5840375A | Date: <u>24</u> Month: <u>11</u> Year: <u>1998</u> |
| 2 | | Date: __ Month: __ Year: __ |
| 3 | | Date: __ Month: __ Year: __ |
| 4 | | Date: __ Month: __ Year: __ |
| 5 | | Date: __ Month: __ Year: __ |

6. Conclusions of the Action:

☐ On the Specification:

- ☐ The subject matter contained in the application is not patentable under Article 5 of the Patent Law.
- ☐ The description does not comply with Article 26 paragraph 3 of the Patent Law.
- ☐ The draft of the description does not comply with Rule 18 of the Implementing Regulations.

☒ On the Claims:

- ☐ Claim(s) _____ is/are not patentable under Article 25 of the Patent Law.
- ☐ Claim(s) _____ does/do not comply with the definition of inventions prescribed by Rule 2 paragraph 1 of the Implementing Regulations.
- ☒ Claim(s) 1, 2, 4, 5, 8-10 does/do not possess the novelty as required by Article 22 paragraph 2 of the Patent Law.
- ☒ Claim(s) 3, 11-15 does/do not possess the inventiveness as required by Article 22 paragraph 3 of the Patent Law.
- ☐ Claim(s) _____ does/do not possess the practical applicability as required by Article 22 paragraph 4 of the Patent Law.
- ☐ Claim(s) _____ does/do not comply with Article 26 paragraph 4 of the Patent Law.
- ☒ Claim(s) 9, 10, 14, 15 does/do not comply with Article 31 paragraph 1 of the Patent Law.
- ☐ Claim(s) _____ does/do not comply with the provisions of Rules 20-23 of the Implementing Regulations.
- ☐ Claim(s) _____ does/do not comply with Article 9 of the Patent Law.
- ☐ Claim(s) _____ does/do not comply with the provisions of Rule 12 paragraph 1 of the Implementing Regulations.

7. In view of the conclusions set forth above, the Examiner is of the opinion that:

- ☐ The applicant should make amendments as directed in the text portion of the Notification.
- ☒ The applicant should expound in the response reasons why the application is patentable and make amendments to the application where there are deficiencies as pointed out in the text portion of the Notification, otherwise, the application will not be allowed.
- ☐ The application contains no allowable invention, and therefore, if the applicant fails to submit sufficient reasons to prove that the application does have merits, it will be rejected.

8. The followings should be taken into consideration by the applicant in making the response:

- (1) Under Article 37 of the Patent Law, the applicant should respond to the office action within 4 months counting from the date of receipt of the Notification. If, without any justified reason, the time limit is not met, the application shall be deemed to have been withdrawn.
- (2) Any amendments to the application should be in conformity with the provisions of Article 33 of the Patent Law. Substitution pages should be in duplicate and the format of the substitution should be in conformity with the relevant provision contained in "The Examination Guidelines".
- (3) The response to the Notification and/or revision of the application should be mailed to or handed over to the "Reception Division" of the Patent Office, and documents not mailed or handed over to the Reception Divisions have no legal effect.
- (4) Without an appointment, the applicant and/or his agent shall not interview with the Examiner in the Patent Office.

9. This Notification contains a text portion of 3 pages and the following attachments:

- ☒ 1 cited reference(s), totaling 8 pages. ☐

Examination Dept. 3 Examiner: YING, ZHIHONG Seal of the Examination Department

Text Portion of the Notification of the First Office Action

1. Claims 1-8 and 11-13 are claims on a rare earth metal-based permanent magnet, and claims 9, 10, 14 and 15 are claims on a process for producing a rare earth metal-based permanent magnet, which process is, however, not exclusively the process for producing said magnet in claims 1-8 and 11-13. Therefore, the method and the product in the abovementioned claims possess no unity and are not in conformity with Article 31(1) of the Patent Law.
2. Reference document 1 (D1, US5840375A) also discloses a rare earth metal-based permanent magnet with the following technical feature in particular (see claim 1): coating a layer of $M_2O.nSiO_2$ film on the surface of R-Fe-B magnet. Therefore, claim 1 is disclosed by D1, and thus lacks novelty as required by Article 22(2) of the Patent Law.
3. The additional technical features in dependent claims 2, 4, 5 and 8 are also disclosed in D1 (see claim 1) as follows: the magnet is R-Fe-B magnet and the oxide film comprises SiO_2 and is formed as a vitrified film having a thickness in the range from 100 nm to 3 μm . Therefore, claims 2, 4, 5 and 8 also lack novelty as required by Article 22(2) of the Patent Law.
4. Although D1 does not disclose any detail of using the R-Fe-N magnet, however, only a film formed on the surface of said magnet is herein used to ~~separate the corrosive material and the magnet in order to achieve the~~ corrosive resistance. It is obvious for those skilled in the art to apply the same film on the surface of R-Fe-N magnet to achieve the corrosive resistance. Therefore, claim 3 possesses no substantive feature and represents no notable progress, and thus lacks inventiveness as required by Article 22(3) of the Patent Law.
5. Should the applicant incorporate the additional technical features in claims 6 and 7 into claim 1, the novelty would be better acquired.
6. In claim 9, the process for forming a metal oxide film on the surface of a magnet is disclosed in D1 (see claim 1). Therefore, claim 9 lacks novelty as

required by Article 22(2) of the Patent Law.

7. The additional technical feature in claim 10 is also disclosed in D1 (see claim 1) as follows: the oxide film comprises SiO_2 . Therefore, claim 10 lacks novelty as required by Article 22(2) of the Patent Law.
8. Claim 11 relates to a rare earth metal-based permanent magnet. D1 also discloses (see claim 1) a rare earth metal-based permanent magnet, even though the "interfacial layer between the metal oxide film and the entire surface of said magnet with rare earth element atom chemically bonded with a film forming metal atom through oxygen atom" is not mentioned, the products obtained by same processes from same raw material must be the same, hence the abovementioned technical feature should exist in the magnet of claim 1. Through the examination on the magnet in D1 using conventional techniques, the additional technical features in claim 11 could be obtained by those skilled in the art. Therefore, claim 11 possesses no substantive features and represents no notable progress, and thus lacks inventiveness as required by Article 22(3) of the Patent Law.
9. The additional technical features in dependent claims 12 and 13 are also disclosed in D1 (see claim 1). Therefore, claims 12 and 13 lack inventiveness as required by Article 22(3) of the Patent Law.
10. Claim 14 relates to a rare earth metal-based permanent magnet. D1 also discloses (see claim 1) a method for producing a rare earth metal-based permanent magnet and discloses the step of coating the surface of the magnet with metal oxide film, even though the "interfacial layer between the metal oxide film and the entire surface of said magnet with rare earth element atom chemically bonded with a film forming metal atom through oxygen atom" is not mentioned, the products obtained by same processes from same raw material must be the same, hence the abovementioned technical feature should exist in the magnet of claim 1. Through the examination on the magnet in D1 using conventional techniques, the additional technical features in claim 14 could be obtained by those skilled in the art. Therefore, claim 14 possesses no substantive feature and represents no notable progress, and thus lacks inventiveness as required by Article 22(3) of the Patent Law.
11. The additional technical features in claim 15 are also disclosed in D1 (see

claim 1). Therefore, claim 15 lacks inventiveness as required by Article 22(3) of the Patent Law.

Based on the abovementioned reasons, the present applicant can not be granted a patent right. The applicant should reorganize the claims to overcome the defects. The amendments of the application documents should comply with Article 33 of the Patent Law, not go beyond the disclosure of the original description and claims.